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Performance reporting as a management tool in the Department of the Navy.

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NAVY GRADUATE COMPTROLLERSHIP PROGRAM

PERFORMANCE REPORTING AS A MANAGEMENT TOOL IN THE DEPARTMENT OF THE NAVY

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CHAPTER I

INTRODUCTION

> Management in large-scale undertakings has to be able to see the end results of its operation—the forest in spite of the trees. Masses of detailed operations have to be reduced to intelligible form—to simple quantitative measurements that can be grasped. ... Intelligent decisions on broad questions of management demand broad over-all facts which quantitative measurement alone can supply.[1]

One of the historic origins for the public report by executive authorities in the United States is the Constitutional provision requiring the President "from time to time to give to the Congress information on the State of the Union". Reporting on performance in the Department of the Navy is public reporting. It is used to supply information not only for management purposes of the Secretary of the Navy, but also to provide current information to justify budget requests made to the Congress and to report to the Congress progress in the accomplishment of Department of the Navy programs. The Congress expects the Department of the Navy to conduct its operations in the most effective, economical manner possible. Members of the Congress expect to receive reports on the operations of the Navy which they can understand and interpret. Therefore, the over-all operation of the Navy has been broken down into separate programs, each somewhat similar to a commercial enterprise. The problems encountered in the management of

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[1]Joel Gordon, "Operating Statistics as a Tool of Management", Public Administration Review, Summer 1944.

these programs are somewhat similar to the problems encountered in the management of commercial enterprises. The civilian Secretariat of the Navy is composed of men who are well acquainted with business practices. Consequently, it is necessary to utilize a performance reporting system which will provide the type of control information these individuals can effectively employ in the management of the affairs of the United States Navy.

Most writers have preferred to name the reporting systems employed by controllers "progress reporting". Since most of these systems are based on generating information useful in comparing actual performance against planned performance, it is believed that a preferable term is "performance reporting".

The management of both commercial enterprises and public undertakings are interested in measuring performance, whether good or bad, rather than progress. Progress connotes satisfactory accomplishment, while performance connotes both satisfactory and unsatisfactory accomplishment. The purpose of reporting systems is to provide information with which to correct unsatisfactory accomplishment.

Performance is relative and can be evaluated only in relation to past performance; performance of other activities carrying on comparable programs; or established goals. Reporting systems provide for comparisons of current performance against past and planned performance. Reporting systems establish reasons for failure to achieve planned performance as a basis for administrative action.

In order to evaluate the adequacy of the performance reporting

system employed in the Department of the Navy, it is first necessary that the function of performance reporting in the concept of controllership be fully understood. Chapter II sets forth the function of performance reporting in the concept of controllership. The Department of the Navy is managed in a manner similar to the integrated commercial enterprise, with its parent company and operating divisions. At the Secretary of the Navy level of organization, the over-all operations of the Navy are coordinated. The over-all operations are broken down into integrated programs, under the management control of the Bureaus and Offices of the Department of the Navy. These Bureaus and Offices in turn manage the field installations devoted to the accomplishment of their individual programs. The field installations manage their own affairs in the accomplishment of their individual missions. Chapter III deals with performance reporting as employed by the Comptroller of the Navy at the Secretary of the Navy level of organization. The information needed at this level of organization is necessarily generated at the field installation level. Consequently, the information supplied to the Comptroller of the Navy is collected by the program coordinators, the Bureaus and Offices. Chapter IV deals with the method of performance reporting employed by one of the Bureaus of the Department of the Navy, the Bureau of Supplies and Accounts. Chapter V evaluates the performance reporting system of the Department of the Navy against the criteria developed in Chapter II.

The term "controllership" is generally preferred to the term "comptrollership". Since the Department of the Navy designates individuals concerned with control information as "comptrollers", the two terms are used interchangeably.

CHAPTER II

THE FUNCTION OF PERFORMANCE REPORTING IN CONTROLLERSHIP

Business operations today are so extensive in scope and varied in nature that they cannot be supervised by any one individual or by any small group of individuals functioning as a directing unit. The continued growth of industry has developed the need for a management team to devote greater attention to planning responsibilities, while delegating operating responsibilities to other supervisors, who can more easily resolve problems associated with operations. As particular corporations continue to expand to meet the increasing demands of a progressive industrialized economy, it is necessary that the management team keep itself currently informed concerning the progress of operations toward the fulfillment of the objectives of the enterprise. As particular corporations become larger in scope, the necessity for fine adjustments, with corresponding rapid operating responses, become more apparent. These fine adjustments are necessary to keep the enterprise closely attuned to the economic realities of the industry of which it is a part, the pressures of the market, the social responsibility of making the best use of large capital investment, and to protect and assist the continued growth of the economy as a whole.

In order to keep the enterprise on an "even keel", the management team has been expanded, in relatively recent history, to include the controller. The inclusion of the controller in the management team has

evolved in order to manage the individual enterprise more intelligently through the use of a continuous and organized flow of information concerning operations. The controller provides for top management continuous and organized information about the environment in which the enterprise functions, its operating plans, and the actual results of its operations. Such information provides management with the facts with which to make decisions necessary to adjust the operations of the enterprise in a progressive economy. The controller's responsibility begins with the reporting of the facts about actual operations and extends naturally to the assembling, summarizing, and reporting of operating plans in the form of a budget and to comparisons with the reported results of other companies and of industry in general.[1] The establishment of policy and the planned coordination of all activities within the company to make these policies effective are the responsibilities of the management team. The records of the company provide a wealth of detailed information, from which pertinent facts are assembled in an orderly manner and communicated to management in the form of reports by the controller, to provide for management a factual background for the establishment or modification of policy and for the control of actual performance in line with established policy.[2]

The plan of the operations of the enterprise is usually set forth in the budget. The budget provides a mechanism for forecasting realizable results over a definite period, for planning and coordinating the various

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[1]David R. Anderson, "Controllership's Contribution to Executive Management", Controllership in Modern Management, ed. by Thornton F. Bradshaw and Charles C. Hull (Chicago: Richard D. Irwin, Inc., 1950) p. 51.

[2]Mason Smith, "Internal Reports", Corporate Treasurer's and Controller's Handbook, ed. by Lillian Doris (New York: Prentice-Hall, Inc., 1950) p. 797.

operations and functions of the enterprise to achieve realizable results, and for so controlling and limiting any variations from the approved plan of action that the desired results are realized.[3] Allen H. Ottman states:

> To carry out the objectives of a budget program, actual results must be measured against budgeted figures, analyses must be made of the differences, and necessary correctives applied as the program goes forward.[4]

Therefore, a system of informative reporting is essential if the budget program is to be of value to the management team. The budget division is staffed with the minimum personnel required to do those parts of the budget procedure that cannot be handled elsewhere in the organization. This insures that the budget work will be performed largely by personnel who will be accountable ultimately under the budget for the success or failure of their actions. The right of each supervisor to have a part in setting his own budget goals makes the budget a personal matter. The management team insures against loose budgeting procedures by utilization of the budget review and approval procedure. The essentials of an effective reporting system must consider the following: (1) Number of reports; (2) Timing; (3) Type; (4) Design and content; (5) Handling. The number of reports will be minimum when each executive is furnished with only those budget reports that concern the operation of the functions and activities for which he is directly responsible. Reports must be current, or the corrective action which they indicate to be necessary cannot be taken in time to be effective. The essential information contained in each report is:

1. Description of items being reported.

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[3]Allen H. Ottman, "Developing and Installing A Budget Program", ibid. p. 99.

[4]Allen H. Ottman, "Administering a Budget Program", ibid. p. 139.

2. Annual budget for the item being reported.

3. Actual performance for the period.

4. Budgeted performance for the period.

5. Variation—actual from budget.

6. Explanation of variation.

The following budget reports are utilized most widely by business enterprises:

1. Sales budget report.

2. Cost of production budget report.

3. Orders received, shipments, production, inventory, and balance-order budget report.

4. Budget reports for various expenses.

5. Profit and loss budget report.

6. Gain or loss in control report.

7. Capital budget report.

8. Cash budget report.

The most useful of these reports is the Gain or Loss In Control Report, which shows a comparison of actual period and year-to-date expense variations from budget with allowable expense variations from the budget, and points up the areas and elements of expense that call for better control by management. It indicates needed reduction or increase in various primary and secondary expense accounts to keep operations in line with actual sales performance. The budget director analyzes all significant variances between actual and budgeted performance and prepares a written statement of the reasons for each such variance to accompany each budget report at the time it is issued. Normally, once each period the president and his functional vice presidents meet with the budget director to review

the over-all performance of the enterprise. Periodically the budget director meets with each functional vice president and his department heads, and with each plant manager and his supervisors, to review the performance of the divisions, plants, and plant departments. The reports discussed in these meetings are based on the principle of exception. In applying this principle, Frederick W. Taylor explained:

> The manager should receive only condensed, summarized, and invariably comparative reports, covering, however, all of the elements entering into the management, and even these summaries should be carefully gone over by an assistant before they reach the manager, and have all the exceptions to the past averages or to the standards pointed out, both the especially good and the especially bad exceptions.[5]

A good report may be defined as the communication in usable form to a responsible party of timely factual data for a specific purpose. Without reports, management is lacking factual data and must then rely solely upon memory and instinct. The success with which the controller's reporting efforts are met depends upon (1) his appreciation of the fundamental principles of reporting, and (2) his ability to understand the intricacies and the individuality of the enterprise, the nature of the business, the pattern of responsibilities within the management group, and even the idiosyncrasies of management personnel in applying these principles.

The answers to the following questions contain the essentials of reporting for purposes of control of the modern enterprise:

1. What facts are material?
2. How are the facts best presented?
3. When are the facts required?
4. What must the report accomplish?

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[5]Frederick W. Taylor, The Principles of Scientific Management, (Harper & Brothers, Copyright 1947) p. 7.

5. Who is the audience for the report?

These questions highlight some very important elements in effective reporting. If the report fails to establish communication with the recepient and help him to take the necessary action, it is nothing but paper ready for the scrap heap. Therefore, a report must provide information for a specific purpose. It must reflect the actions of those factors through which management exercises control of operations. The report must present a clear and understandable statement of the pertinent facts. It must be simplified by the elimination of all unnecessary detail. The use of summaries and supplementary schedules to replace the one detailed report is one of the quickest and easiest ways to accomplish report simplification. The ideal report shows the fewest possible figures and presents the pertinent facts clearly. The report must encourage decision by engendering confidence in presenting facts which are accurate. The design and arrangement of the report must focus attention on the items, relationships, trends, and exceptions that should have the consideration of the executive; it must call attention to those facts or factors that require special notice. The report must show factual data on accomplishments or lack of success by comparing actual results with planned accomplishment. It should contain comparison or measurement data in order to reveal progress or trends sufficiently to guide executives in their decisions.

If it is to be effective, the report must be timely. It decreases in effectiveness in direct proportion to the time taken in preparation. Among the many devices that have been used to expedite the preparation and issuance of reports are: (1)Planning the methods of recording basic data,

and the chart of accounts, to fit the report requirements; (2) Prepreparation of report forms; (3) Presentation of preliminary reports from control accounts; (4) Presentation of reports as they are prepared; (5) Use of mechanical equipment for reproduction. The use of mechnical and electronic equipment is currently receiving a great deal of attention in industry in order to achieve greater facility with the resolution of masses of information into intelligible, manageable facts.

The act of communication consists of two parts: (1) Presentation of the facts; (2) Acceptance and understanding of the facts. The report must be stated in terms understandable to the recepient, preferably in units through which direct control over the activity is exercised. The report must be able to stand by itself, tell its own story clearly and accurately, and relate facts to the responsibility for the accomplishment of objectives. The characteristics of a good report include: (1) Clarity; (2) Integrity; (3) Utility.[6] A sound reporting system should incorporate the following factors:

1. Unity of the reporting system.
2. Standardization.
3. Flexibility.
4. Relation of basic records to reports.
5. Control of reports and report forms.
6. Effect of the general economy and the growth trend of the enterprise upon the reporting system.[7]

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[6]R. H. Robnett, T. M. Hill, and J. A. Beckett, Accounting, A Management Approach, (Chicago: Richard D. Irwin, Inc., 1951) p. 205.
[7]Mason Smith, op. cit., p. 797.

David R. Anderson classifies reports in the following manner:

Operating Reports
- Control Reports--used for direct control of operations.
  - Current Control Reports--to spot deviations from planned performance as they occur so that prompt action may be taken ... .
  - Summary Reports--to summarize deviations from planned performance over a period of time ... as a check on current control reports and as an indication of the over-all effectiveness of the performance ... .
- Information Reports--used for planning and policy determination.
  - Classification by Method of Approach:
    - Trend Reports--based on vertical comparisons of the results of the same activity ... over a period of months or years.
    - Analytical Reports--based on horizontal or cross-section comparisons of the results during a given period of different activities or of similar activities in different locations, or on comparisons of actual results with ... objective.
  - Classification by Area of Activity Covered:
    - Individual-Activity Reports--limited to activities under the direction of a single responsible executive.
    - Joint-Activity Reports--showing the combined results of activities which are related but which do not head up to a single executive.

Financial Reports
- Static Reports--limited to an analysis of financial strength and structure as of a given date.
- Dynamic Reports
  - Financial Control Reports--measuring actual financial condition against planned (budgeted) condition.
  - Measurement of Effectiveness of the Use of Funds--based on the relationships between the investments in various classes of assets and the use made of them.
  - Reports of Changes in Financial Condition--summarizing and analyzing changes in financial condition during a given period.[8]

Many controllers solve the problem of conveying information--information for spot control and review of operating performance; for planning and policy making; about the financial condition, sources and uses of funds employed--to responsible executives by developing a balanced structure of basic statements covering the various activities of the enterprise, shifting the emphasis in comment and interpretation as required, and by supplementing

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[8]David R. Anderson, op. cit., p. 53.

the regular basic reports with special reports on important current problems. Internal operating reports, which provide tabulations and summaries of figure information, and external factors require analysis and interpretation to be used effectively by the management team.

Analyses and interpretations are made to discover and define problems as well as to find solutions to known problems. Frank Wallace lists three basic steps in the analysis of business problems:

> 1. Break down the facts (or figures) into parts (or classifications) so that one can
> 2. Compare the parts to the whole, to each other, and to significant outside factors, and thus determine their relationships. This permits one to
> 3. Determine the reasons for relationships, thus making possible the understanding of the essential nature of the situation and possibly the findings of solutions to the problems involved in the situation.[9]

The first two steps, classifying and comparing, involve the arrangement of figures so that penetrating questions are suggested; the third step involves the answers to these questions--determining the reasons for the relationships. The alternative methods of presentation of the results of analysis and interpretation are: (1) The written report; (2) The oral presentation; (3) The combination of the written and the oral presentation. The choice of the method to be employed depends on the nature and complexity of the material to be presented, the interest of the executive concerned, and the action desired. The written report may be concise, presenting a general picture of the analysis, conclusions, and recommendations, or may fully document all details and discuss fully all conclusions and recommendations. The short sweeping report encourages the executive to read it, and

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[9]Frank Wallace, "Analysis and Interpretation of Business Results", Corporate Treasurer's and Controller's Handbook, ed. by Lillian Doris (New York: Prentice-Hall, Inc., 1950) p. 842.

can contain the details in a supplement. The oral presentation permits more flexibility in that the individual presenting the report does not lose the initiative and has an opportunity to elaborate on items not fully understood. The oral presentation facilitates a meeting of the minds of the analyst and the executive. The use of visual material and a written summary allows the audience to hold the presentation longer in memory.

The purpose of this chapter is to highlight the need for adequate performance reporting in modern business enterprise and to present the principles of such reporting. The need for adequate performance reporting is not likely to diminish in the near future, rather it is likely to increase as business enterprises become more complex with the growth of the modern economy. The relatively recent development of mechanical and electronic aids has resulted in tremendous strides in better management of figure information. It is important to note that performance reporting is a staff service, useful directly in operations. The controller is in no position to dictate operational policy. He can only present the facts as they exist in order to assist those individuals with operating responsibility in determining a sound plan of operation, and in formulating effective policies which will achieve the objectives of the enterprise.

CHAPTER III

PERFORMANCE REPORTING IN THE OFFICE OF THE COMPTROLLER OF THE NAVY

The Comptroller of the Navy is organizationally placed in the Executive Office of the Secretary and functions as a staff member of the Secretary of the Navy. The mission of the Comptroller is to advise and assist the Secretary of the Navy in developing and maintaining efficiency and economy through budgetary and fiscal procedures.[1] Subject to the authority of the Secretary, he is directly responsible for budgeting, accounting, progress and statistical reporting, internal audit, and for the administrative organization structure and managerial procedures relating to such responsibilities within the Department of the Navy. In discharging these responsibilities, he is responsible that the following is accomplished:

> (1) Budget administration, including a continuing review of the execution of approved budget plans and programs, the allocation and apportionment of appropriations, and the allocation of over-all personnel ceilings complementary thereto.
>
> (c) Basic fiscal policy, including the development of systems of accounting and financial reporting.
>
> (g) The development of policy and general systems of statistical and progress reporting with respect to fiscal and budgetary matters. The receipt and review of requests from the Department of Defense and other Government agencies for statistical data and the monitoring of completion and consolidation of these reports, when necessary.
>
> (h) Reports control policy and the general implementation thereof with respect to matters under the cognizance of the Comptroller.
>
> (i) Administrative organization structure and managerial procedures relating to budgeting, accounting, progress and statistical reporting, and internal auditing within the Department of the Navy.

SECNAV letter dated 1 June 1950. Subject: Comptroller of the Navy--Establishment of Office and Assignment of Responsibilities. This letter is considered the charter of the Comptroller of the Navy.

VI. Assistant Comptroller, Director of Budget and Reports.
The Assistant Comptroller, Director of Budget and Reports will:

(a) Be responsible for the organization and administration of matters relating to budget, reports and statistics.

(d) Supervise and direct the preparation, analysis, and coordination and review of the budget estimates of the Department of the Navy and the presentation of the budget to the Bureau of the Budget and to the Congress.

(g) Supervise the preparation and submission of reports to the Secretary of Defense, Bureau of the Budget, and the Treasury Department, covering the apportionment and the status of appropriations.

(i) Continuously review rate of obligation and expenditure of appropriated funds and develop budget control as an effective instrument of management.

(k) Plan and prepare statistical analyses to provide budgetary and fiscal information required for management control and determination of broad administrative policy.

(l) Receive and review requests from outside agencies for statistical data. Answer requests from published data when available; or channel requests to the proper Bureau, Board, or Office, monitor the completion of these assignments and consolidate reports when necessary.

(m) Maintain liaison with statistical offices of the Department of Defense and other Government agencies and represent the Navy on committees and in conferences dealing with statistical policies and methodology.

(o) Determine the budget and fiscal reports and forms control policy for the Department of the Navy. Review reporting methods, procedures and requirements for budgetary and fiscal statistical reports, and insure that full coordination precedes the establishment of new reports.

(p) Coordinate the development of standards of presentation, classification and definition to obtain uniformity of Navy reports. Provide statistical data and graphics for the Secretary's office.

VII. Assistant Comptroller, Accounting, Audit and Finance.

(f) Develop and prepare for publication recurring summary reports of a fiscal, cost, operating and capital property accounting nature and compile special reports on these matters as required.[2]

The Secretary of the Navy issued an instruction in November 1953 concerning the function of the comptroller in organizations other than his own office. Parts of that letter are quoted:

II. Functions of Comptrollership.
A. Basic Functions. The basic functions of comptrollership should be performed by or for every bureau, office, and field activity, regardless of whether or not a formal comptroller organization is established. These functions are as follows:

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[2]Ibid.

1. Integrated System for Financial Management. Establishes, coordinates, and maintains an integrated system of staff service that will provide to the commanding officer the factual data essential for effective management control of operations. Provides technical guidance and direction in financial matters throughout the organization, as a staff service to the commanding officer. This integrated system will provide for a classification of programs administered and their objectives; for an inventory of budget plans and program schedules that should be kept current; for processes of budget formulation, review, and execution; for the collection of obligation, expenditure, cost, and other accounting and operating statistics data; and for a review of program performance and of the pattern of resources utilization. Promotes economy and efficiency in the performance of assigned programs.

2. Budgeting. Provides guidance and instructions for preparation of the budget; reviews resources requirements and justifications for the various programs and prepares estimates of the cost thereof; compiles the annual budget; in connection with the budget process, recommends allocation of funds and civilian personnel to programs within the command, and revisions thereof as required; analyzes variances from the budget plan and recommends remedial action where appropriate; determines areas where desirable financial reprogramming may be effected; initiates action to adjust financial plans to available funds and, when required, submits requests for additional funds with justifications.

4. Program Analysis. Measures and analyzes performance, program status and trends against the approved programs and budget plans and schedules, and reports the results of operations to responsible levels of command. The system described in 1. above provides for the collection of data that will permit this kind of appraisal and detection of variances from the operating and budget plan so that management can take the appropriate action. This function of comptrollership is considered an extremely important staff service to the commanding officer, who has the responsibility for decisions. Analyses and comparisons should be timely and presented with recommendations for action or decision so that funds may be used effectively and economically.

5. Progress Reports and Statistics. Develops guides and criteria for the collection and coordination of statistical data and prepares special statistics as required by the responsible levels of command. Serves as coordinator and official clearance center for the release of statistical data. Each organizational component will have distinctive requirements for periodic progress reports and for special statistical data on the programs it administers. Statistical reports should be rendered in time and in a manner that will insure optimum use by management.

V. Elaboration of Duties.

B. Bureaus, Headquarters and Office Level.

3. Progress Reports and Statistics. The progress reports and statistics function consists of the following duties:

a. Develops and/or coordinates within the bureau reporting systems from which data are derived as a basis for quantitative analysis of performance against approved programs, budget plans, and schedules.

b. Maintains records on budget plans and schedules, examines trends and program status, and reports variances from plans to responsible levels of management.

c. Provides a central coordination point for all budgetary and fiscal statistical data released to higher authority.

d. Develops guides and criteria to assist field activities in obtaining statistics reported to the bureau.

e. Prepares recurring progress reports for top management for all major programs as related to the financial plan, highlighting unusual situations.

f. Performs special statistical analyses as required.

g. Serves as liaison with Navy Comptroller on matters relating to program reports and statistics.[3]

The instruction also elaborates a similar list of duties for the progress reports and statistical section at the field activity level. The recommendations submitted by the Hoover Commission under "Recommended Basic Premises and Technical Features of a System of Financial Management in the Department of Defense 1953" included:

G. Reporting For Appropriated Funds.

1. Every allotment holder shall submit to the grantor a monthly report on the status of his allotments, with supporting schedules of commitments, obligations, accrued expenditures, (or expenses), as appropriate, in comparison with the latest approved, revised budgets. These reports also shall set forth similar comparison of budget allowances and expenses for "unfunded costs". Such reports will also be a medium for furnishing revised quarterly budgets for the remainder of the current fiscal year.

2. Each operating agency, and military department as a whole, in turn, shall prepare summarized, consolidated reports of the budgeted and actual status of appropriations, including commitments, obligations, accrued expenditures, (or expenses), disbursements, and "unfunded costs", as appropriate, based upon the allotment reports, the appropriation-apportionment accounts, appropriation-allotment accounts, and summary accounts of cash receipts and disbursements. Such reports at the overall departmental level shall also include condensed, appropriate similar data relative to revolving funds.

3. The monthly and annual reports of each military department and Office of the Secretary of Defense shall be submitted to the Secretary of Defense, the Director of the Bureau of the Budget, and the Secretary of the Treasury. Such reports will provide the basic data for the respective agencies to be included in consolidated financial reports for

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[3]SECNAV Instruction 5400.4 dated 18 November 1953. Subject: Establishment of Comptroller Organizations in Bureaus, Headquarters, Offices, and Field Activities of the Navy and Marine Corps.

the Federal Government as a whole.

4. To the extent appropriate and helpful, reports at every level should contain statistical data of performance, work loads, etc., in comparison with costs, for use in review and analysis of the reports.

Reports at every level shall be the subject of review and analysis by Comptroller personnel. Written comments on an "exceptions" basis shall be prepared and included with the reports as an aid to operating officials at the appropriate level in undertaking corrective actions, when required. Likewise, written comments of appropriate operating officials shall be passed up to the next higher level in explanation of unsatisfactory situations, with indication of corrective action being taken when appropriate. Such data shall include reports on violations of law in incurring obligations.[4]

The above quotations establish the place of the comptroller in the Department of the Navy. The Comptroller of the Navy has established the policy that program reporting in the Navy will be conducted by the Bureaus and Offices, who have responsibility for measuring efficiency. The Bureaus and Offices then submit reports to the Comptroller of the Navy, which provide the basic information and knowledge used by him in his reporting to the top management of the Navy.

The composition of the top management team of the Department of the Navy determines the requirements for reporting of information. The Secretary and the Assistant Secretaries of the Navy are normally business men on leave from their respective industries. Consequently, as much as possible, the information submitted to them must be in the form in which they are best able to make use of it. Every effort is made to present the information in a manner similar to presentation made in commercial enterprises. While the profit and loss statement measures the efficiency of the individual enterprise, the measure of efficiency in the Navy is the economical, effective

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[4]Report of the Committee on Government Operations, United States Senate, "Senate Action on Hoover Commission Reports". (Washington, D. C.: United States Government Printing Office. 1953) p. 43.

accomplishment of its mission. The mission must be stated in accurately developed plans. Accomplishment of the mission must be measured in terms of actual performance against planned performance. The reporting system functions to provide information regarding actual performance.

The reporting system employed by the Comptroller of the Navy must provide information useful to business men in a new environment. The basic functions served by reports to top management of the Navy are: (1) General background; (2) Provide a red flag in areas requiring management investigation; (3) Provide a basis for management decision. Management never makes decisions on the basis of reports alone, but makes the investigations necessary to reach a decision conerning the problem highlighted by the reports. The Comptroller's reporting system coordinates the programs of the individual Bureaus and Offices and the appropriations necessary for accomplishment of the Navy mission.

The management problem of the Secretary can be appreciated when it is realized that the assets of the Navy total $68,500,000,000.00 at acquisition cost; that 950,000 military and 413,000 civilian personnel are employed by the Department of the Navy. In addition, the Department operates the several fleets and their supporting units, industrial activities, service activities, and the Military Sea Transportation Service. By comparison, the one hundred largest manufacturing enterprises in the United States possess a combined total of $70,000,000,000.00 in assets.

The budget of the Navy is an expression of the annual Mobilization Readiness Plan. The budget sets forth the requirements of the Navy--forces, supporting establishment, personnel, maintenance, and major programs. Financial and performance reporting parallels as nearly as possible the command organization channels. The responsibilities for management are also

responsibilities for reporting, and each Bureau and Office budgets and accounts for the programs it manages. Rear Admiral E. A. Solomons, the Deputy Comptroller of the Navy, emphasizes that timeliness is most important in order that reports may be an aid for executive control.[5]

The Navy Budget is broken down into twenty-one Appropriations. Obligations are reported monthly against the apportionments of these appropriations. Charts presented to the top management of the Navy show what the appropriations will buy in the nature of steaming hours, overhaul starts, etc. . The budgeted plan is shown on these charts, and actual performance is plotted against the planned performance. Apparent slippages require reprogramming. These charts are based on the monthly reports of each Bureau and Office to the Comptroller of the Navy concerning obligations, expenditures, and non-fiscal data for each program. The general ledgers, containing the primary control accounts of the Navy, are maintained by the Comptroller, while the subsidiary ledgers are maintained by the individual Bureaus and Offices. The Progress Reports and Statistics Division of the Office of the Comptroller, the focal point for all reports, utilizes the information submitted by the Bureaus and Offices as its raw material.

Reports are presented to top management orally, with visual aids, or in written form. The plan under which the program is operating; the actual accomplishments as compared with the plan; the areas in which actual accomplishments differ from the plan; and a suggestion as to what top management can do in order to accomplish the plan are included. Graphic presentations are used to highlight deviations from plan, with more detailed

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[5]R. Adm. E. A. Solomons, "Progress Reports to Top Management of the Navy Department". An Address delivered to the Financial Management Round Table of the Society for the Advancement of Management, Washington, D. C., 19 October 1954.

background being presented in a narrative discussion. The Statistical Review, the title of which has recently been changed to Financial and Statistical Trends, reflects programs in the following areas of responsibility:

1. Manpower--covering civilian personnel, military personnel, and hospital patients.

2. Material--covering aircraft deliveries and acceptances, supply, and ordnance.

3. Finance--covering obligations and expenditures.

4. Aeronautical matters--covering aircraft inventory.

5. Chief of Naval Operations interests--covering naval ships, active and reserve.

6. Facilities--covering major installations.

7. Marine Corps interests--covering Marine Corps personnel.

Regular statistical supplements covering management areas are presented on a quarterly basis. Problem area details are presented in narrative form by appropriate analysts. Special statistical reports are presented as required by the particular situation.

Written reports vary from brief tables, analyses, and graphs covering broad areas, to detailed documents with full descriptions and complete definitions. It has been found that, normally, top management will not read a detailed report. The detailed report does have historical value, however, and can be read at the convenience of top management, and can be reread if necessary. The Comptroller utilizes a monthly summary card to record flash statistics for the convenience of top management. These 3"x5" cards are used as flash reports of key monthly statistics to show

performance in broad areas where the plan or trend is generally known to the user. These cards are extremely useful for quick reference purposes in the daily contacts with external interests.

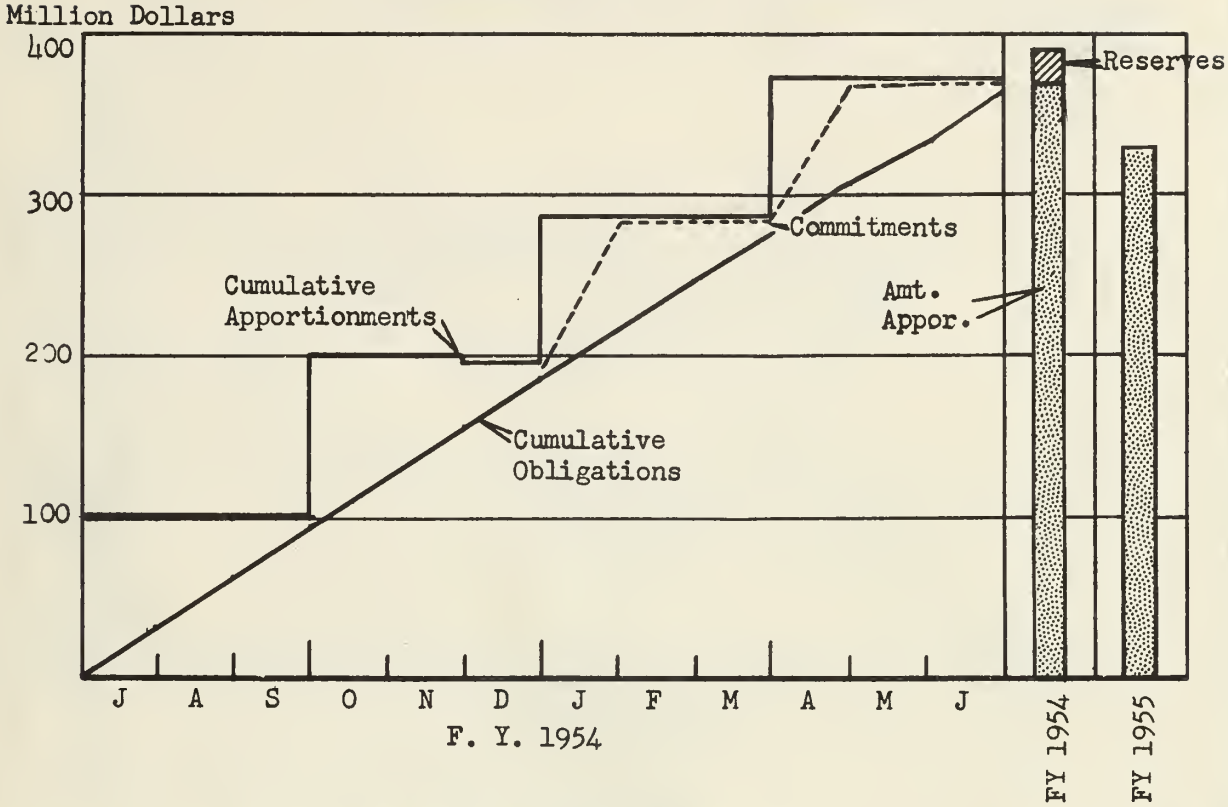
Flash analyses of statistical highlights provide a timely, brief, graphic and narrative presentation of significant changes in broad program areas, and suggest areas appropriate for further investigation. These highlights have been found valuable in getting information to top management in time for action to be taken, especially if limited to areas where action is possible if required.

The Analytical Review provides a review of performance in program areas over a longer period of time than a month and compares performance against plans or trends. Chart 1, "Cumulative Monthly Apportionments and Obligations Under the Appropriation Service-Wide Supply and Finance, Navy", is an example of the presentation made in the Analytical Review. It serves as a frame of reference for evaluating plans as presented in budgets and as general information to keep top management informed on budgetary programs. The information presented is broad in coverage and is based on summarization of operating data. It is effective to the extent that it raises questions; but is not intended to provide answers, even though it may suggest solutions.

The verbal presentation, or briefing session, provides quick communication of information to top management in those cases where speedy action is required. Only key facts are presented against background information already in possession of top management.

Regular chart room sessions, with visual aids in the form of 30"x40" charts, present performance and trend information to top management covering all major programs. This type of presentation serves as an aid in remembering the most salient points of the report. Special charts are

Department of the Navy
CUMULATIVE MONTHLY APPORTIONMENTS AND OBLIGATIONS
Appropriation Service-wide Supply and Finance, Navy



(Dollars)

Date	Cumulative Apportionments	Cumulative Obligations	Outstanding Commitments	Uncomm. and Unobligated (1-(2+3))
0	1	2	3	4
F. Y. 1950	NA	NA	NA	NA
F. Y. 1951	NA	424,890,302	NA	NA
F. Y. 1952	491,602,000	490,812,621	NA	789,379
F. Y. 1953	474,134,142	469,474,537	NA	4,659,605
F. Y. 1954	372,492,000	365,038,026	4,767,757	2,686,217
July	102,000,000	32,206,123	NA	69,793,877
August	102,000,000	64,050,670	NA	37,949,330
September	102,000,000	95,833,162	NA	6,166,838
October	200,000,000	127,448,070	NA	72,551,930
November	200,000,000	157,570,271	NA	42,429,729
December	197,000,000	187,962,615	7,801,433	1,235,952
January	287,000,000	217,137,615	66,135,876	3,726,509
February	287,000,000	244,714,823	40,013,650	2,271,527
March	287,000,000	274,139,214	9,915,023	2,945,763
April	372,500,000	303,638,276	66,096,090	2,765,634
May	372,500,000	332,178,150	38,098,000	2,224,000
June	372,492,000	365,038,026	4,767,757	2,686,217
F. Y. 1954 (Plan)	-	391,500,000	0	0
F. Y. 1955 (Est)	337,000,000	337,000,000	0	0

Chart 1

introduced into the framework of the regular charts where necessary. Chart 2, "F. Y. 1954 Expenditures"; Chart 3, "Naval Personnel Active Duty"; Chart 4, "Active Fleet Steaming Hours"; Chart 5, "Major Activities"; and Chart 6, "Cumulative Monthly Apportionments and Obligations, Total Department of the Navy" are examples of the types of charts used by the Comptroller of the Navy in reporting to the top management of the Navy.

The methods employed by the Comptroller of the Navy in reporting to all levels of management in the Department of the Navy are consistent with the practices utilized in commercial enterprises. The totality of the effort is much greater, however, in that each major program corresponds with the total effort of a commercial enterprise.

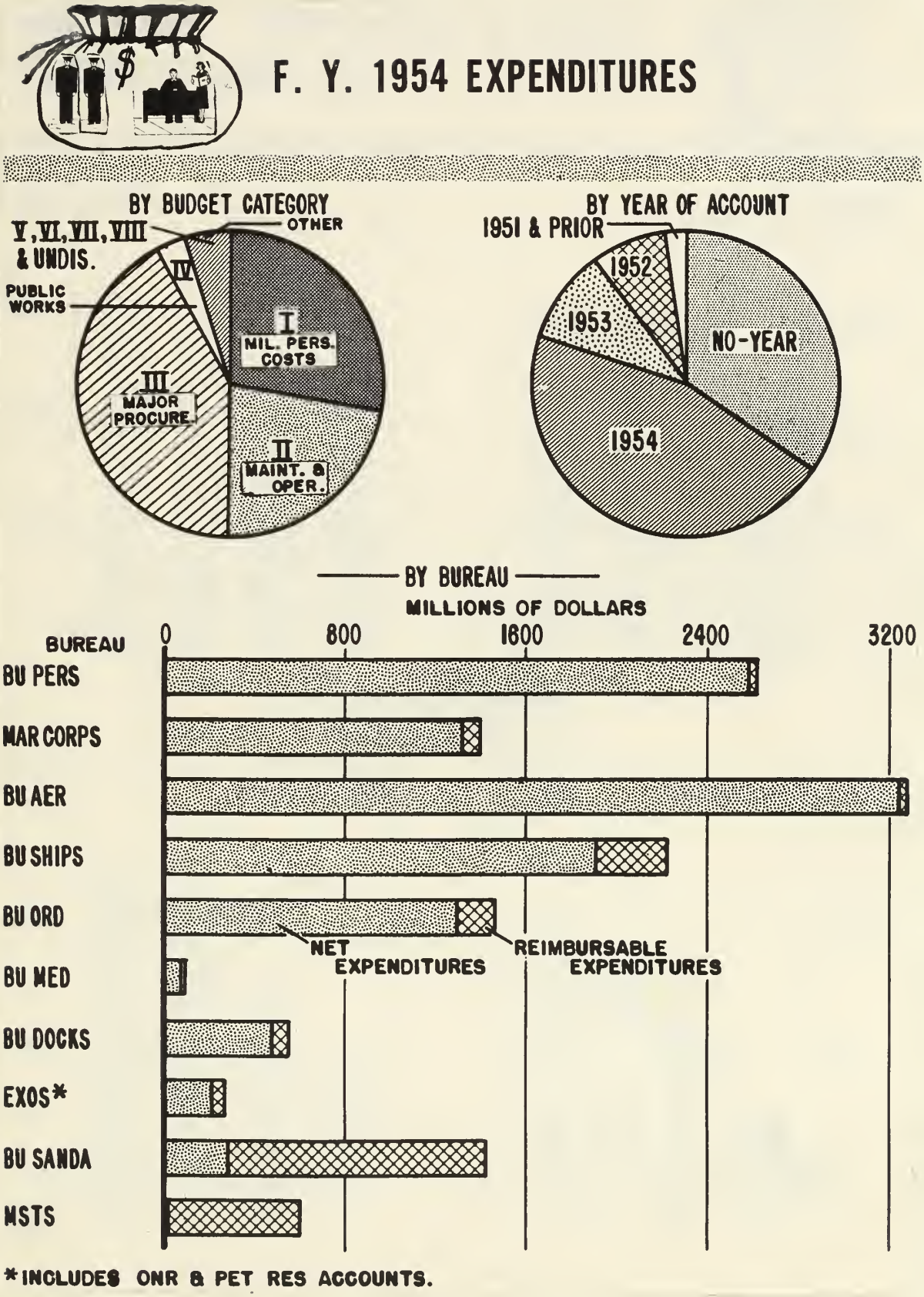

F. Y. 1954 EXPENDITURES
BY BUDGET CATEGORY
V, VI, VII, VIII & UNDIS.
OTHER
IV
PUBLIC WORKS
I NIL. PERS. COSTS
III MAJOR PROCURE
II MAINT. & OPER.
BY YEAR OF ACCOUNT
1951 & PRIOR
1952
1953
NO-YEAR
1954
BY BUREAU
MILLIONS OF DOLLARS
BUREAU
0
800
1600
2400
3200
BU PERS
MAR CORPS
BU AER
BU SHIPS
BU ORD
BU MED
BU DOCKS
EXOS*
BU SANDA
MSTS
NET EXPENDITURES
REIMBURSABLE EXPENDITURES
*INCLUDES ONR & PET RES ACCOUNTS.

Chart 2

TREND IN EXPENDITURES 1981 - 1984
BY BUDGET CATEGORY

Expenditures Continued

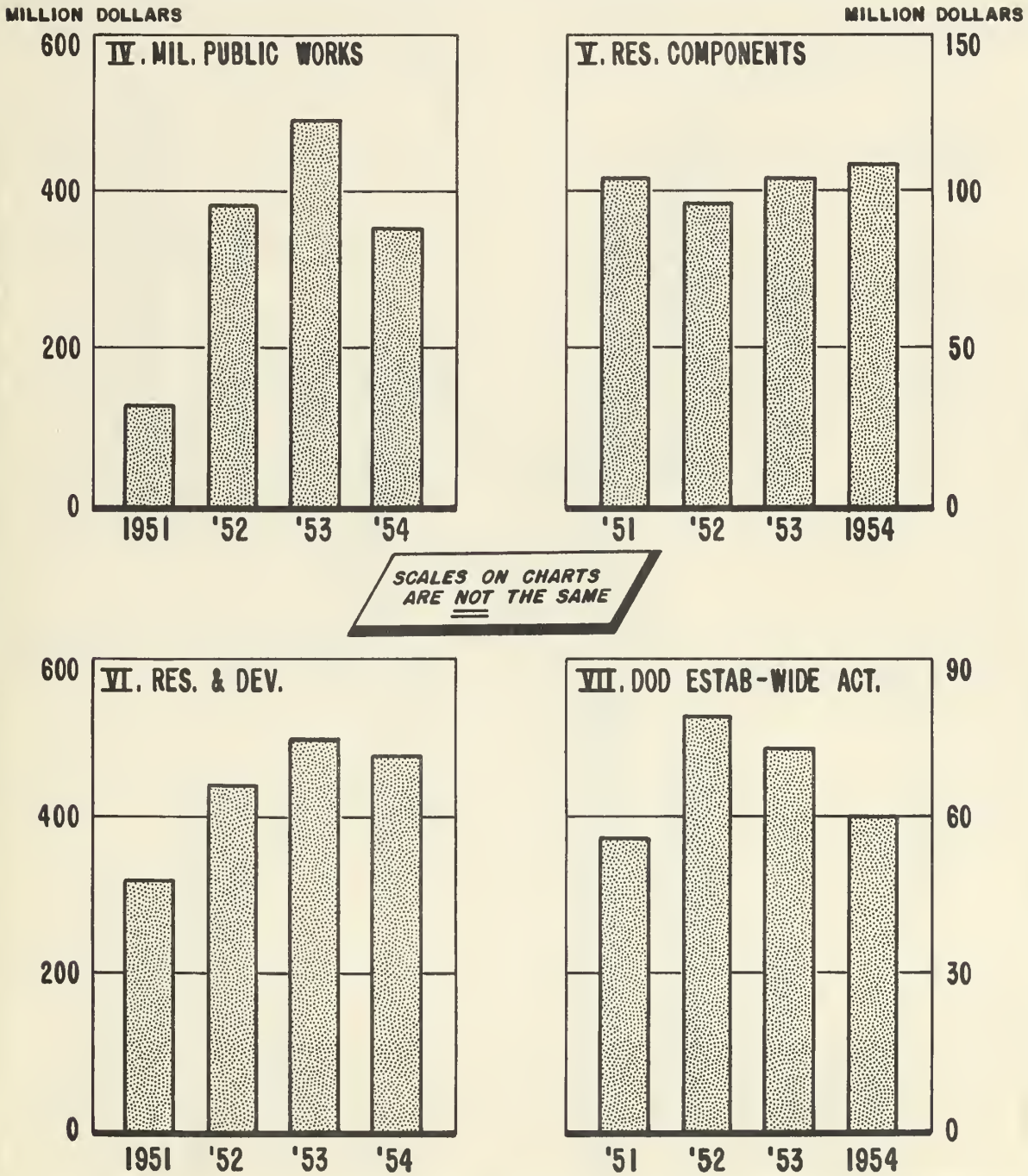
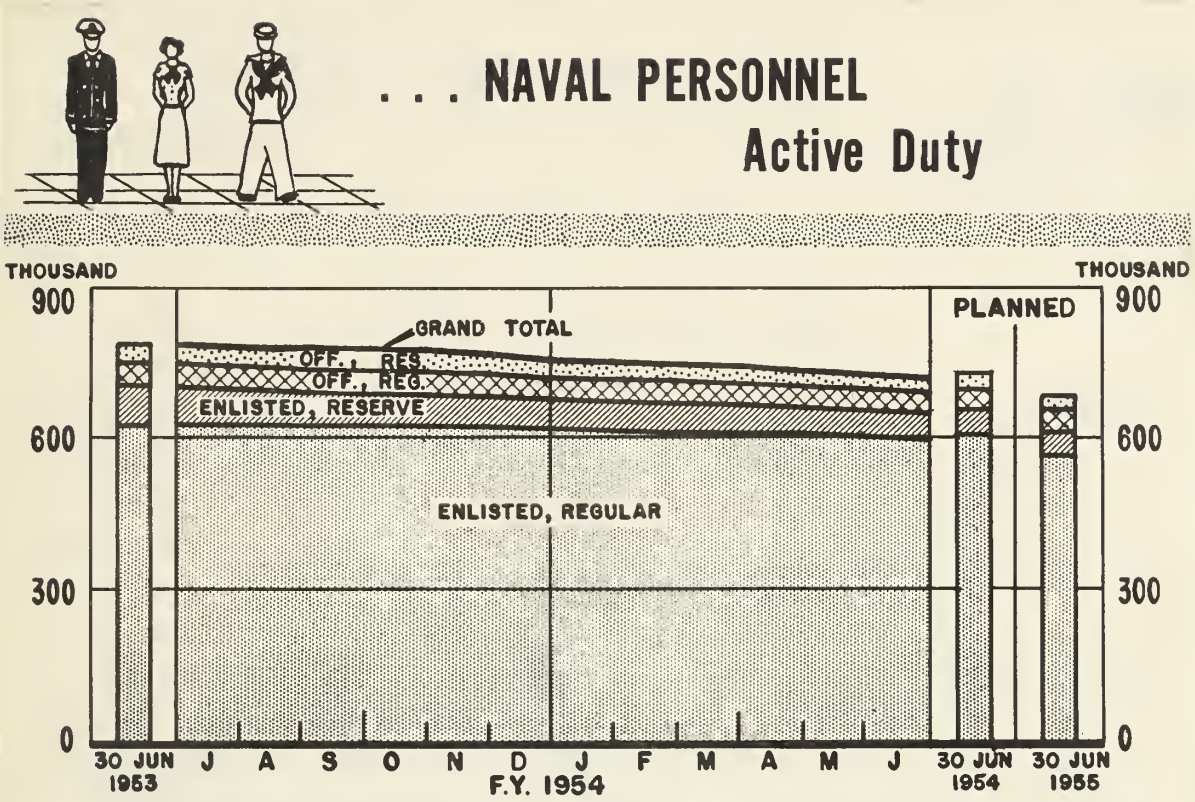


Chart 2a

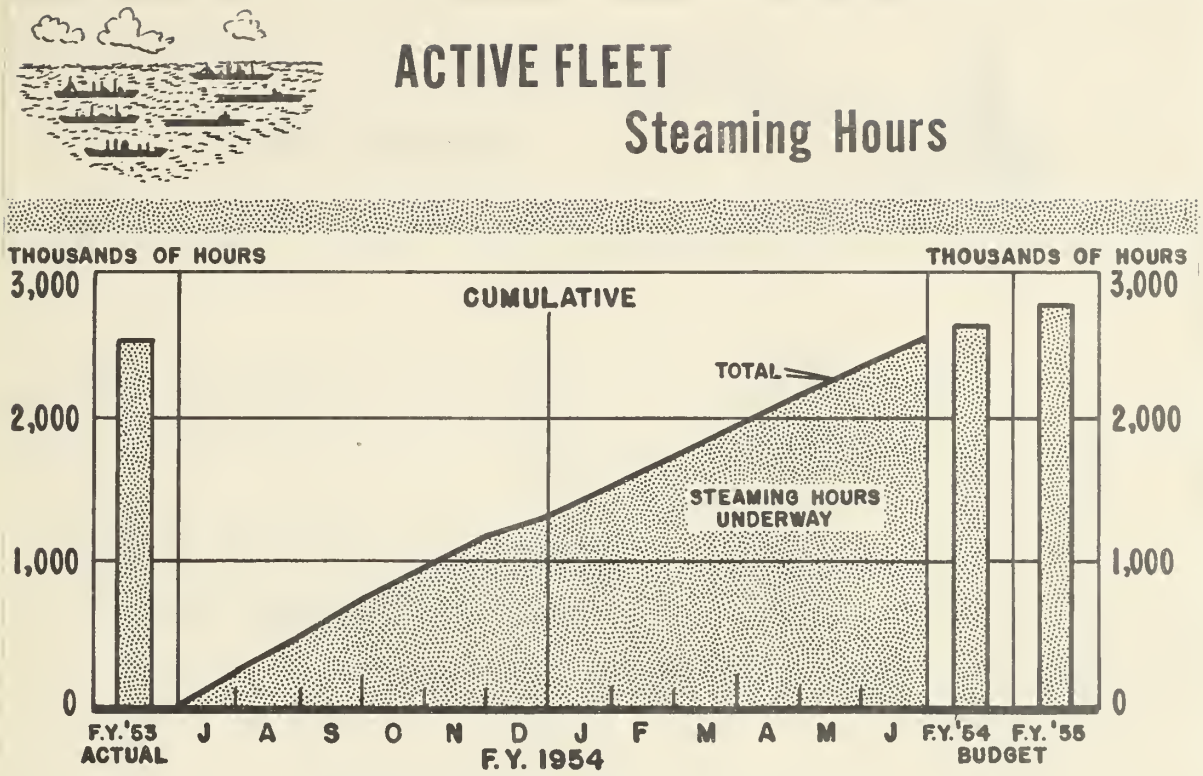


REGULAR AND RESERVE NAVAL PERSONNEL ON ACTIVE DUTY
ACTUAL AND PLANNED FISCAL YEARS 1953-1955

Date	Grand Total	Officers 1/			Enlisted		
		Total	Reserve on Active Duty	Regular on Active Duty	Total	Reserve on Active Duty	Regular on Active Duty
1	2	3	4	5	6	7	8
30 June 1953	788.1	81.7	37.1	44.6	706.4	80.2	626.2
F. Y. 1954							
31 July	785.2	82.1	37.5	44.6	703.1	77.7	625.4
31 August ..	782.7	82.0	37.5	44.5	700.7	75.1	625.6
30 September	778.4	81.6	37.1	44.5	696.8	72.6	624.2
31 October .	774.6	80.9	36.4	44.5	693.7	70.1	623.6
30 November.	771.3	81.6	37.1	44.5	689.7	66.5	623.2
31 December.	758.8	80.1	35.7	44.4	678.7	58.1	620.6
31 January .	754.9	80.3	36.0	44.3	674.6	54.5	620.1
28 February.	750.7	79.1	35.0	44.1	671.6	52.5	619.1
31 March ...	743.4	78.4	34.6	43.8	665.0	49.5	615.5
30 April ...	738.5	78.4	35.0	43.4	660.1	48.0	612.1
31 May	730.0	77.2	34.3	42.9	652.8	46.8	606.0
30 June(Pre)	720.4	78.5	34.2	44.3	641.9	44.4	597.5
Estimate							
30 June 1955	682.0	74.0	29.8	44.2	608.0	40.5	567.5

1/ Excludes Officer Candidates.

Chart 3

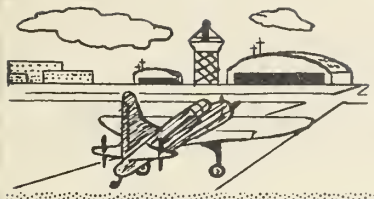


STEAMING HOURS UNDERWAY - ACTIVE FLEET
Fiscal Years 1953 - 1955
(Thousands of Hours)

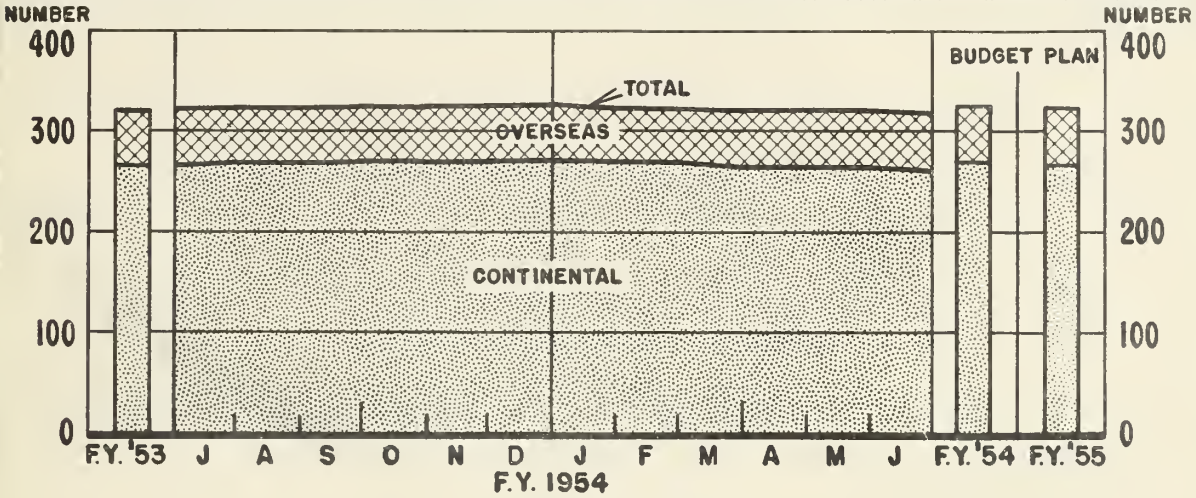
DATE	TOTAL	WARSHIPS	MINE WARFARE	PATROL	AMPHIB. WARFARE	AUXILIARY
1	2	3	4	5	6	7
F. Y. 1953 Budget	3,545	1,285	363	237	799	861
F. Y. 1953 Actual	2,522	1,118	226	168	466	544
F. Y. 1954 Budget	2,636	1,220	216	140	491	569
F. Y. 1954	2,573	1,137	226	151	491	568
July	238	113	20	16	41	48
August	238	106	22	8	49	53
September ...	255	108	22	15	50	60
October	229	100	20	12	45	52
November	216	105	16	14	39	42
December	132	64	11	9	20	28
January	210	99	21	12	34	44
February	206	89	19	13	39	46
March	213	84	19	11	48	51
April	203	79	17	13	44	50
May	219	93	23	14	40	49
June	214	97	16	14	42	45
F. Y. 1955 Budget	2,772	1,332 a/	247	169	457	567

a/ Includes 4,000 steaming hours for Experimental Vessels.

Chart 4



MAJOR ACTIVITIES



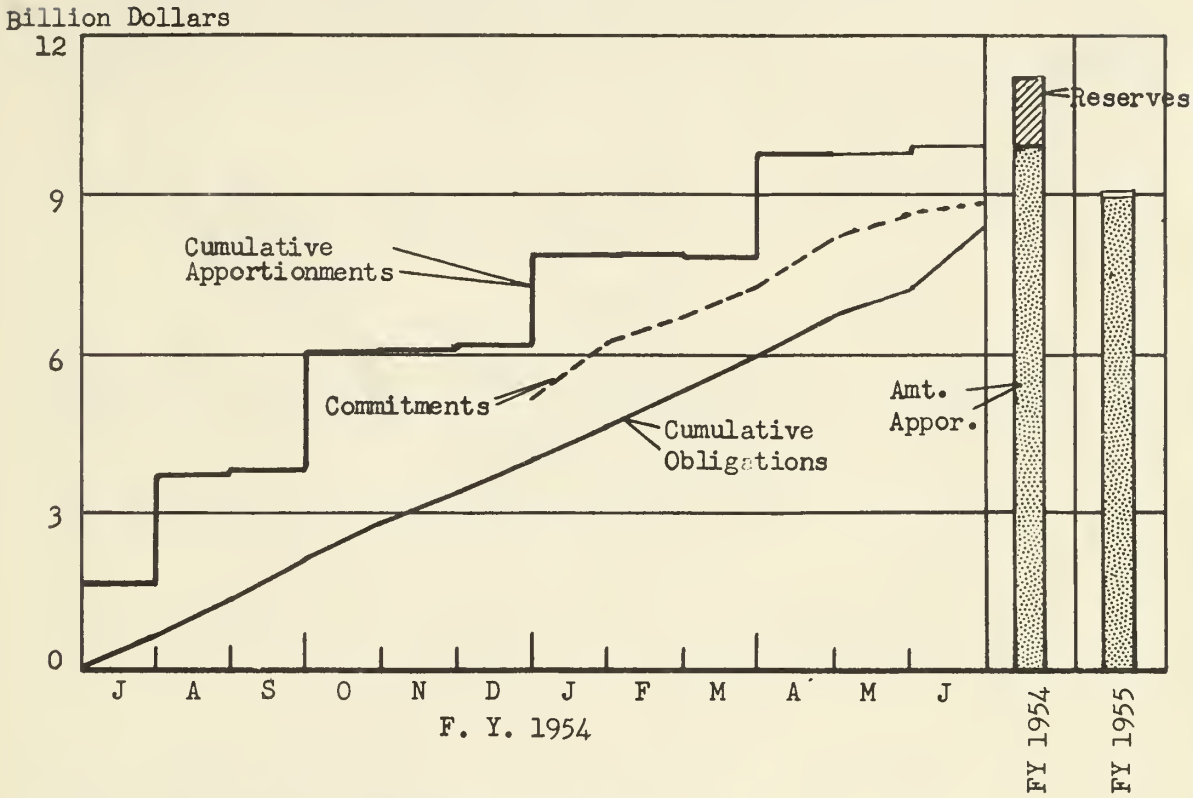
MAJOR ACTIVITIES
ACTUAL AND PLANNED FISCAL YEARS 1953-1955

Date	Grand Total	Continental U. S.	Overseas
1	2	3	4
30 June 1953 ...	321	266	55
F. Y. 1954			
31 July	323	268	55
31 August	322	267	55
30 September ...	324	269	55
31 October	323	268	55
30 November	324	269	55
31 December	326	271	55
31 January	322	267	55
28 February	322	267	55
31 March	319	264	55
30 April	320	264	56
31 May	320	264	56
30 June	317	261	56
Budget Plan 30 June 1954 ...	325	269	56
Budget Plan 30 June 1955 ...	323	266	57

Each of the major activities listed meets the following criteria:
1. It has a plant and equipment value in excess of $1 million.
2. It employs, as part of its permanent complement, in excess of 100 personnel (military or civilian or both).

Chart 5

Department of the Navy
CUMULATIVE MONTHLY APPORTIONMENTS AND OBLIGATIONS
Appropriation Total Department of the Navy (Direct Accts.)



(Million Dollars)

Date	Cumulative Apportionments	Cumulative Obligations	Outstanding Commitments	Uncomm. and Unobligated (1-(2+3))
0	1	2	3	4
F. Y. 1950	4,352.6	4,159.9	NA	192.7
F. Y. 1951	12,585.1	12,443.6	NA	141.5
F. Y. 1952	16,310.5	15,482.2	NA	828.3
F. Y. 1953	13,596.6	12,256.6	NA	1,340.0
F. Y. 1954	9,807.6	8,258.2	597.5	951.9
July	1,599.7	569.3	NA	1,030.4
August	3,691.5	1,235.5	NA	2,456.0
September	3,743.9	2,006.8	NA	1,737.1
October	6,013.4	2,768.1	NA	3,245.3
November	6,017.0	3,292.4	NA	2,724.6
December	6,129.5	3,879.8	1,277.3	972.4
January	7,894.2	4,561.3	1,665.5	1,667.4
February	7,900.5	5,250.3	1,440.6	1,209.5
March	7,888.0	5,949.8	1,250.0	688.2
April	9,783.4	6,657.8	1,473.3	1,652.3
May	9,792.1	7,236.0	1,289.9	1,266.2
June	9,807.6	8,258.2	597.5	951.9
F. Y. 1954 (Plan)	-	10,544.2	0	0
F. Y. 1955 (Est)	8,903.5	8,903.5	0	0

Source: Standard Form 133 and F.Y. 1955 Budget Document.

Chart 6

CHAPTER IV

PERFORMANCE REPORTING IN THE BUREAU OF SUPPLIES AND ACCOUNTS

In order to properly appreciate the specific role of the Bureau of Supplies and Accounts, it is first necessary to relate its functions to the over-all objectives of the United States Navy. The United States Navy operates as an integrated enterprise in which personnel, ships and aircraft are coordinated into a cohesive fighting force. The organization of the Navy is divided into two large general organizations--the Fleets and the Shore Establishment. The mission of the Fleet Commands is to operate the ships and aircraft in an efficient and effective manner for accomplishment of objectives as set forth in the basic military policy of the nation. The mission of the Shore Establishment is to provide the Fleet Commands with all of the personnel, materiel, and services necessary to maintain the ships and aircraft in a state of readiness which will accomplish the objectives of the national military policy. These requirements result in demands on every industry and on agriculture in the national economy. In order to manage the effective placing of these demands on the economy, the over-all responsibility for providing these services has been divided among the several Bureaus and Offices of the Department of the Navy on a specialization basis. Each Bureau and Office has responsibility for a program which, when coordinated with the programs of other Bureaus and Offices, contributes to the over-all program of the Department. The over-all Navy program is set forth in the

Navy Basic Mobilization Plan. The program administered by the Bureau of Supplies and Accounts is the Navy Supply System.

In order to accomplish its mission, the Department of the Navy prepares the Navy Budget for submission to and approval by the Congress. When approved, the Navy Budget becomes the plan for the operation of the Navy during the fiscal year for which it is approved. The Navy Budget is comprised of the budgets prepared by the Several Bureaus and Offices. When approved, each Bureau and Office has the responsibility for executing its budget. The Bureau of Supplies and Accounts views its budget as:

> An operating plan expressed in terms of financial requirements;
> The budget function is an integrated cycle of formulation, justification, and execution, all contributing to the accomplishment of the operating plan;
> The best method of executing the budget requires, first, an operational review to assure that each field installation plan is in consonance with the approved master plan, and, second, a financial review to assure that planned operations have been costed on the most efficient basis feasible;
> Successful accomplishment of the budget execution phase requires integrated reporting systems at the disposal of qualified management organizations;
> Improved efficiency, which is a prime objective of budget execution, can best be obtained by stimulating individual initiative through decentralized authority and responsibility.[1]

The Bureau views the budget as it is viewed in commercial enterprise, as "an operating plan expressed in terms of financial requirements". Primary emphasis is placed on the operation being funded, and not on the dollars included in the support. In the execution of its budget, the Bureau coordinates operating plans for each of seventy-five installations under its financial control, involving an annual cost of $300,000,000.00. These installation plans contract and expand with the movement of the fleets,

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[1]R. C. Moot, "Budget Execution--BuSandA", an address delivered to the Management Accounting Seminar, Bureau of Supplies and Accounts, Washington, D. C.

since they are designed to support the fleets. The fleets are mobile, and supply demands cannot be predicted accurately in terms of location. However, total demand can be computed, regional demand can be resaonably projected, and specific installation demand can be made available on relatively short notice. The Bureau formulates its budget to fund these plans in the most effective, economical manner feasible. An attempt is made in budget execution to obtain a better level of efficiency than planned. The Bureau reviews each of the seventy-five individual plans to assure itself that the over-all plan is efficiently funded, and to assure that legal limitations, both as to fund availability and propriety of expenditure, are not exceeded.

Review procedures commence with the master operating plan. Chart 7, "Supply Distribution Programming", is a breakdown of a large segment of the over-all operating plan of the Bureau. The chart shows, on the left, the functional listing of supply type functions, and shows, on the right, the unit of measure for each function. The unit of measure is the means of quantitatively measuring the workload in each function. In the formulation of the Bureau's budget estimate, the operating plan for the Supply Distribution System indicates how many measurement tons of material is expected to be received and issued, how many units are to be packed, and how many line items of demand are to be received in the issue control function. This is the framework by which the over-all operating plan is formulated and approved; and is the framework by which the plan is executed. The budget contains control totals for each function in terms of approved planned workload. Each field installation submits its operating plan on the same basis. Chart 8, "NavSandA Form 678, Allotment Request and Justification", is used by each field installation for requesting funds from the Bureau. The functions listed in Chart 7 are listed in column 1. Each function is cross-referenced

THE SUPPLY DISTRIBUTION SYSTEM - PROGRAMMING

FUNCTION	UNIT OF MEASURE
PHYSICAL MOVEMENT OF MATERIAL	
STORAGE OPERATIONS	M/TONS RECEIVED & ISSUED
PACKING	UNITS PACKED
TRAFFIC OPERATIONS	M/TONS RECEIVED, ISSUED, & TRANSHIPPED
WATERFRONT OPERATIONS	M/TONS RECEIVED, ISSUED & TRANSHIPPED
BULK FUEL OPERATIONS	BARRELS RECEIVED & ISSUED
MOVEMENT CONTROL OF MATERIAL	
ISSUE CONTROL	LINE ITEMS OF DEMAND
STOCK CONTROL	LINE ITEMS PROCESSED
STORAGE DOCUMENTATION	LINE ITEMS OF RECEIPT & ISSUE
TRAFFIC DOCUMENTATION	LINE ITEMS OF TRAFFIC
RECEIPT CONTROL	LINE ITEMS RECEIVED
PROCUREMENT	LINE ITEMS PROCURED
TECHNICAL	LINE ITEMS REVIEWED
INSPECTION	EXTERNAL INSPECTION
FREIGHT CONTROL	ROUTE ORDERS
MATERIAL CUSTODY	
PRESERVATION	UNITS PRESERVED
DISPOSAL	M/TS DISPOSED
INVENTORY	INVENTORY ITEMS RECONCILED
SECURITY	SPACE SECURED
LEASED STORAGE & TANKAGE	EXTERNAL STORAGE
MAINTENANCE OF MATERIAL	M/TS IN STORE
SERVICES (3)	DIRECT LABOR SERVICED
MAINTENANCE (2)	AREA MAINTAINED
ACCOUNTING & ADMINISTRATION (5)	LABOR SERVICED
COMMISSARY OPERATIONS (1)	SALES
CAPITAL INVESTMENT (3)	PLANNED INVESTMENT

Chart 7

ALLOTMENT REQUEST AND JUSTIFICATION

For Quarter Ending ____________________

Appropriation SWS&FN ____________________

Allotment No. ____________________

From: ____________________

Code ____________________
(Bureau use only)

Accounting Activity ____________________

ALLOTMENT FUNCTION NUMBER	W/M NO.	ALLOTMENT FUNCTION	FIELD AND BUREAU EVAL. OF REQUIREMENTS	CURRENT		REQUIREMENTS OF NEW QUARTER									UN-OBLIGATED BALANCE	AMOUNT OF ALLOTMENT
				TOTAL OBLIG. EST. THRU CURRENT QUARTER	COMPLEMENT CURRENTLY ASSIGNED	COMPLEMENT		WORKLOAD	DOLLARS					REF.		
						QTR. AVERAGE REQUIRED		ESTIMATE FOR QUARTER	LABOR		MATERIALS	SERVICES RENTALS ETC.	TOTAL			
						I V B	TOTAL		O/T AND PREM. P.	TOTAL						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
			Field													
			Bureau													
			Field													
			Bureau													
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NAV. S. AND A. FORM 678 (6-53)

to the work measurement function in column 2, which in turn is cross-referenced to the expenditure account number in column 3. Column 9 lists the planned workload for each function. The Bureau is thus constantly informed concerning the current estimate of work to be performed by each field installation engaged in the specific function.

The Bureau evaluates the workload estimate of each field installation in order to predict supply demand for the over-all Supply Distribution System, and to provide material for use in Navy operations when required, where required, and in the required quantity. Predicting workload is a problem of predicting material consumption and issue. Each broad category of material, such as food, fuel, ships parts, etc., is predicted separately by relating and correlating the use of each material category to the operating element of the Navy which uses this type of material. Chart 9, "Subsistence--Military Strength vs Value of Subsistence Material Issued", relates the issue of food to the military strength of the Navy and shows the close correlation between these two factors. Each field installation performs the same type of evaluation for its workload. In addition, each field installation conducts a market analysis of its customer pattern--to whom material is issued and in what quantities and categories. The Bureau uses these market studies to determine how well the system is working and as a basis for developing improved distribution patterns. In addition to these productive functions, there are some internal functions, such as preservation and maintenance, which must be determined by factors within the field installation. A mutual review by the Bureau and the field installation determines the level of work in these functions.

The Bureau accomplishes the first part of budget execution, operational review, when it completes evaluation of workload. All field

SUBSISTENCE

MILITARY STRENGTH vs VALUE OF SUBSISTENCE MATERIAL ISSUED

FY 1953 — FY 1954

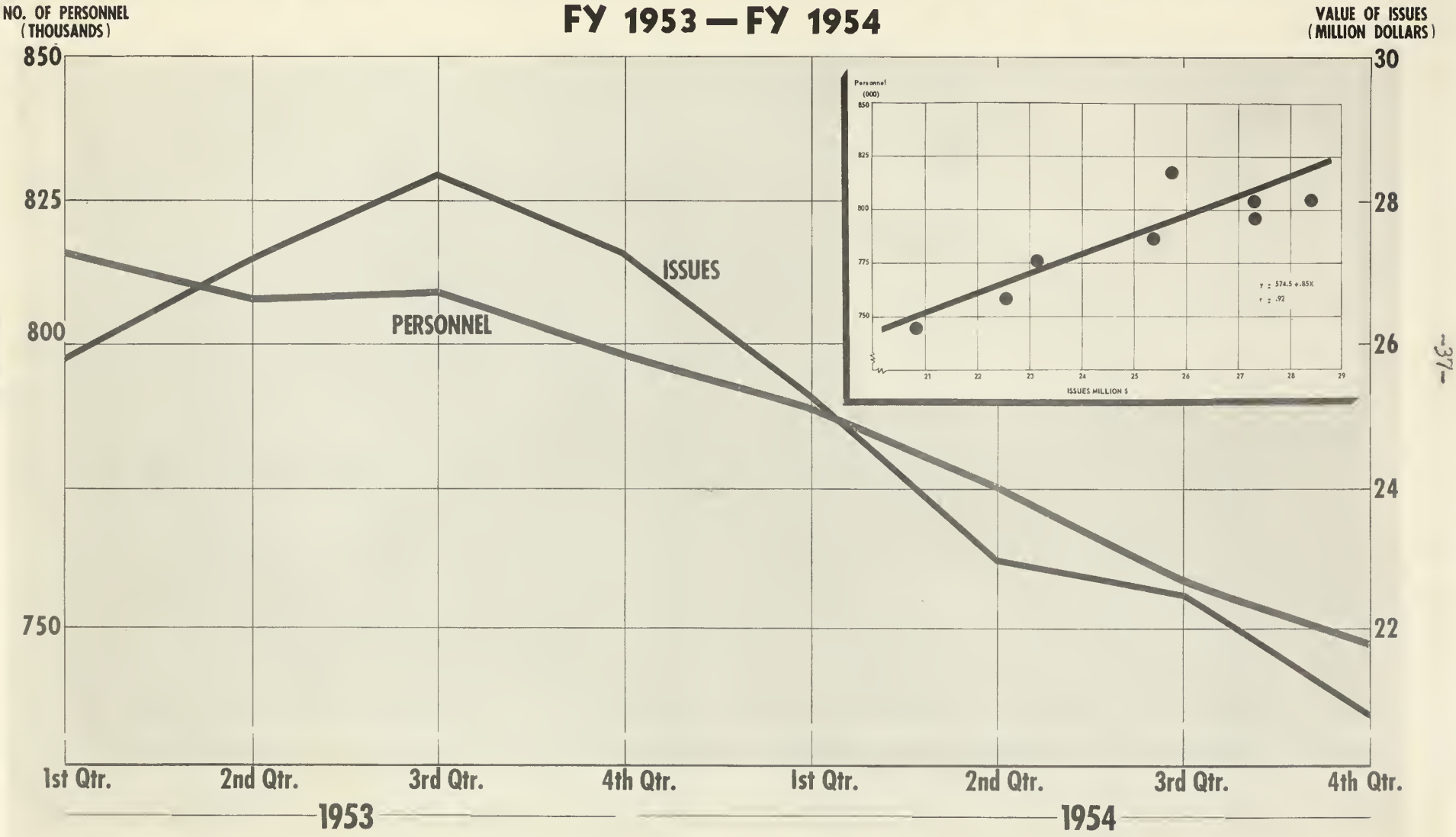

Chart 9

installation operating plans are reviewed separately by function and consolidated and reviewed against the master operating plan. The second part of budget execution is financial review to assure that the workload is performed in the most efficient manner feasible.

The Bureau isolates and controls the large cost elements in its financial administration. It is believed that if the important areas of cost are properly administered, the entire enterprise can be expected to be efficient. The primary cost at field installations is the cost of labor, salary costs amounting to approximately eighty per cent of total costs. It is apparent that the manner in which the labor element is administered is of vital importance in the effort to become increasingly efficient. The workload estimate for each function recorded in Chart 8 is the key factor in determining the cost of labor. For each function in which labor is an element, it is determined how much work one person can accomplish and then how many people are necessary to accomplish the total planned work. The amount of work one person can accomplish in a stated period of time is known as a production rate. For example, if one man can receive or issue two tons of material in one hour in the storage function, the hourly storage production rate is two tons. Among the factors which enter into the determination of a production rate for a specific function at a specific field installation are: (1) The best sustained performance; (2) How well does this performance compare with like field installations doing comparable work; (3) Changes in methods or procedures which affect the production rate. The production rate converts workload into productive labor. The total productive labor requirement, which is determined by dividing total workload by the production rate, is the total number of hours that must be productively worked to accomplish the planned work. To convert this

requirement into people, it is necessary to divide the total hours by the number of working day hours in the period covered by the workload estimate. For example, if the estimated workload in tons is 49,600 for one quarter and the number of working hours in the quarter is 496, the equivalent of 100 productive bodies is needed to accomplish the work at a production rate of one ton per hour. Non-productive time for sick and annual leave and holidays is added to the requirements for productive labor to obtain the quarterly average employment, shown in column 8 of NavSandA Form 678 (Chart 8). Labor dollars, column 11 of NavSandA Form 678, is obtained by multiplying the average salary per function by the average employment. The Bureau's policy is to set the employment level to meet the normal, continuous workload. Peak work periods are met through the use of overtime, which is isolated in column 10 of NavSandA Form 678 in order to keep it under evaluation.

The twenty per cent of cost which is not labor covers the cost of materials consumed in operation and the cost of services. Services costs are based on fixed local contract rates. Satisfactory material to labor ratios have been developed through experience. The computations for materials and services are shown in columns 12 and 13 respectively of NavSandA Form 678.

Under the quarterly apportionment process as practiced by the Bureau of the Budget, funds are authorized for obligation within a quarter and are limiting except for carryover purposes. Consequently, the Bureau of Supplies and Accounts funds its field installations on a quarterly basis. In order to avoid the disadvantages of quarterly funding, the Bureau utilizes a Funds Planning Letter based on an annual basis. Each field installation is required to estimate on an annual basis the funds required in the several

key funding elements. The production rate that appears feasible in each of the several quarters is projected for each function. These rates are established as targets for the individual field installations. Thus the field installation is furnished advance knowledge of the production rate for which the Bureau will provide funds. These estimates together with the the production rates are used as a guide for staffing needs.

The Funds Planning Letter, developed in cooperation with each field activity, provides a functional estimate of workload and attainable production for several quarters in advance. Each field installation submits its current estimate of workload quarterly on NavSandA Form 678 (Chart 8) with explanations of deviations from plan. These two elements permit the Bureau to forecast for twelve months its over-all operating plan and its financial requirements.

The Bureau employs the management tools of reporting systems to assist in resolving the problems inherent in forecasting workload, productivity of labor, and costs of operation. In addition to an accurate knowledge of the immediate past, a continuous flow of data concerning operations at each field installation is necessary. This flow of data reports locally and centrally what has been done, how much it cost to accomplish, and why it was done. Chart 10, "The Integrated Budget Base", lists the required knowledge and the reporting systems utilized by the Bureau to provide the information both to itself and each field installation. These reports answer the following basic questions:

1. What was done?
2. How much of what kind of work was accomplished?
3. How much did it cost to accomplish the work?
4. How much was the dollar cost, in total and on a unit basis?

THE INTEGRATED BUDGET BASE

BUDGET BASE REQUIRED KNOWLEDGE	REPORTING SYSTEMS
1. WHAT WAS DONE? WORK ACCOMPLISHED	1. COST ACCOUNTING SYSTEM APPN. ACCTG. COST REGISTERS OBJECT CLASS REGISTERS
2. HOW MUCH DID IT COST? TOTAL DOLLARS UNIT COST COMPOSITION OF COST TOTAL MANPOWER LABOR PRODUCTIVITY	2. WORK REPORTING SYSTEM 3. MATERIAL REPORTING SYSTEM
3. WHY WAS THE WORK DONE? TOTAL OPERATIONS SHIPS, PLANES, MEN WORKLOAD/OPERATION RATIO SHIPS, PLANES, MEN	4. MANPOWER REPORTING SYSTEM 5. OPERATIONAL DATA REPORTING SYSTEMS

5. How much manpower did it take and what was the productivity of the manpower?

6. Why was the work done?

7. What element of Navy operations created the material demand and the supply workload?

The reporting systems which answer these questions are: First, the financial reporting system, which shows function by function the dollar cost to operate and the composition of the cost. Next, the work reporting system, which reports function by function the volume of work accomplished in terms of selected units of measure. This system in conjunction with the financial reporting system provides the unit cost for each function at each field installation. Next, the material reporting system indicates how much of what kind of material is being issued to use at each activity in the Navy. Next, the manpower reporting system indicates how much of what kind of labor is used in each function. In conjunction with the work reporting system, the manpower reporting system develops production rates by function and by activity. Last, the operations data reporting systems provide knowledge as to details of Navy operations. These data, which include ship overhaul, aircraft overhaul, military personnel, civilian industrial personnel, correlate to total supply demand to present the pattern and level of distribution.

An important feature about the cost, work and manpower reporting systems is the uniform scope of functional reporting. The expenditure account which defines functional areas in the cost system also controls the work description in the work reporting system. The manpower system is integrated with payroll accounting so that labor is identical with that reported in the cost system.

Management tools for budget execution have been developed from these reporting systems. The Bureau has established a performance analysis book for each field installation which reflects monthly workload and manpower effort by function and charts manpower utilization trends. A unit cost book is also available for each installation which charts and reports costs by function on a monthly comparative basis. These books, along with market patterns and field inspection reports, assist in projecting workloads and in the determination of future funding for individual field installations.

Chart 11 shows the organization of the Comptroller of the Bureau of Supplies and Accounts. The Comptroller reports in a staff capacity to the Chief of the Bureau of Supplies and Accounts. While the Comptroller reports to the Chief of the Bureau, he works, in a real sense, for the line operators of the Bureau. The Bureau operating procedures are based on the fact that the benefits to be derived from a sound controllership concept must be expressed in operational improvements stemming from improved management by line operators. The Comptroller functions through the line operators and does not claim credit for economical or effective betterment in operations.

The Statistics Division has four branches. The reports from the work reporting system and the manpower reporting system are received in the Work Measurement Branch. The Service Statistics Branch collects data on commercial operations which are directly comparable with Navy operations. The Management Statistics Branch develops the best means of presenting both the consolidated data for the system and the individual data for each field installation. Distribution of these data follows three primary channels. The first channel is to the Assistant Chief for the specific operation and to the associated working level under the Assistant Chief. The second channel goes both to the Budget and Reports Division and the Internal

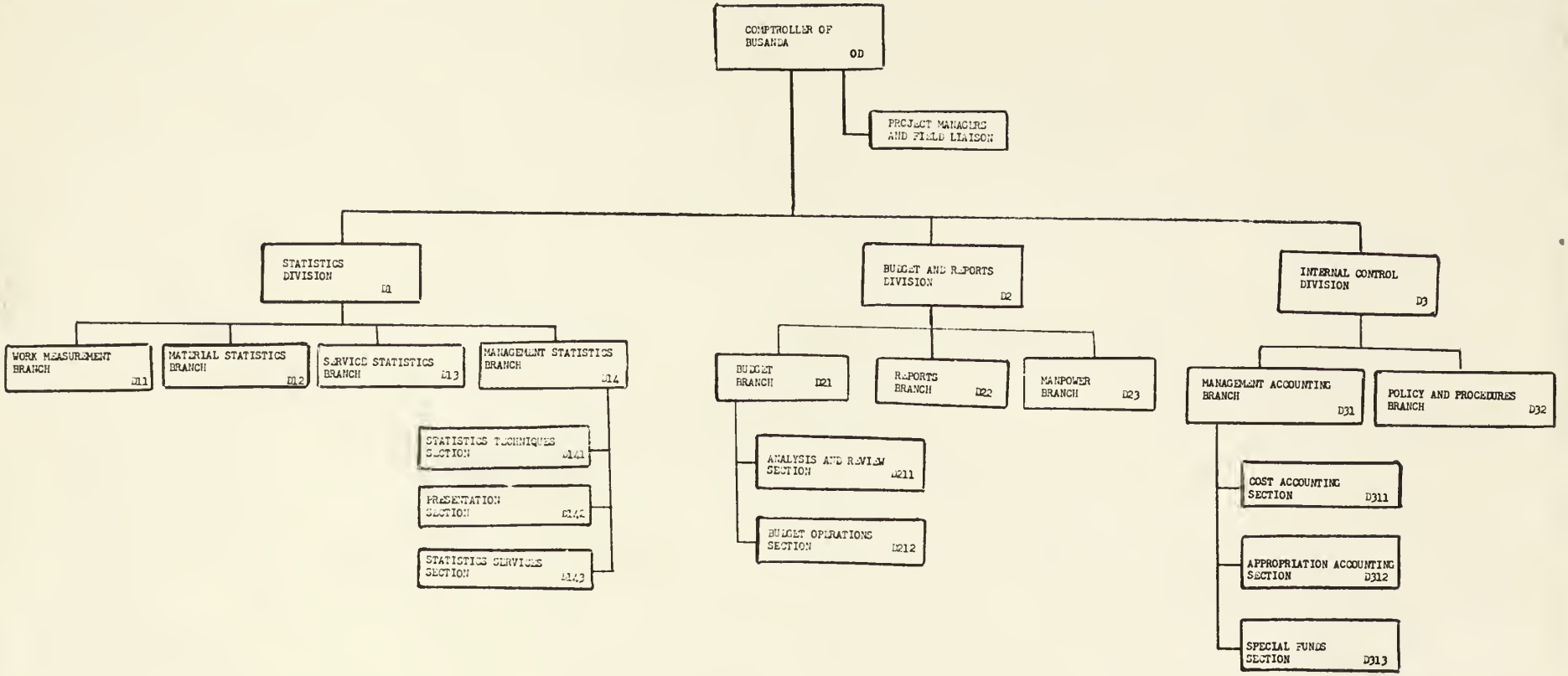
COMPTROLLER OF BUSANDA OD
PROJECT MANAGERS AND FIELD LIAISON
STATISTICS DIVISION D1
BUDGET AND REPORTS DIVISION D2
INTERNAL CONTROL DIVISION D3
WORK MEASUREMENT BRANCH D11
MATERIAL STATISTICS BRANCH D12
SERVICE STATISTICS BRANCH D13
MANAGEMENT STATISTICS BRANCH D14
STATISTICS TECHNIQUES SECTION D141
PRESENTATION SECTION D142
STATISTICS SERVICES SECTION D143
BUDGET BRANCH D21
REPORTS BRANCH D22
MANPOWER BRANCH D23
ANALYSIS AND REVIEW SECTION D211
BUDGET OPERATIONS SECTION D212
MANAGEMENT ACCOUNTING BRANCH D31
POLICY AND PROCEDURES BRANCH D32
COST ACCOUNTING SECTION D311
APPROPRIATION ACCOUNTING SECTION D312
SPECIAL FUNDS SECTION D313

Chart 11

Control Division. The third channel is to the Project Managers and Field Liaison.

All financial accounting is centered in the Internal Control Division. The Cost Accounting Section collects total functional costs and calculates unit costs. Cost and appropriation data are furnished Bureau operating personnel, the Budget and Reports Division, and the Project Managers.

The Budget and Reports Division uses statistical and financial data as a basis for projecting future requirements. The Budget Branch prepares the Funds Planning Letters and reviews the allotment requests. The Reports Branch performs program analysis and performance reporting functions.

Project Managers work very closely with the Assistant Chiefs for Operations. It is their responsibility to assure that the operating aspects of the operating plan are given full consideration in financial administration. They give operating approval for the Funds Planning Letters and the recommended quarterly allotment grants. While final control of funds rests with the Comptroller through direct delegation from the Chief of the Bureau, clearance of proposed action by Project Managers is an operating safeguard which assures responsiveness to operating requirements.

The above is a resume of the place of reporting systems in budget execution as performed by the Bureau of Supplies and Accounts. The Bureau, jointly with field installations, predicts future workload and attainable productivity by function, reviews functional costing quarterly, and grants funds in accordance with the review. Each field installation has an assigned operating mission. The Bureau grants funds to discharge the over-all mission without unnecessary restrictions, decentralizing authority and responsibility for funds administration to Commanding Officers. The Bureau

provides proper management tools and constructive criticism of administrative practices.

It is to be noted that field installations request funds in language of the work measurement report--funding on the basis of productivity. The Bureau in turn uses the same language in its budget requests to higher authority. The reporting system provides dollar control, workload (personnel) control, and productivity control. The Bureau possesses the only composite picture of the Supply Distribution Program of the Navy. The data collected by the reporting system serves two purposes both up and down the line of responsibility: (1) To measure against plan; (2) To justify allocation of funds. It provides information which is decision provoking--in financial management and in operating management. The reporting system emphasizes local contribution. The information submitted in the reports is the same information that the Commanding Officer needs in the efficient management of his installation. These consolidated reports serve the reporting needs of the Assistant Chiefs for Operations and have eliminated a large majority of the operating reports previously required. The basic concept in developing the performance reporting system above described is to maintain a balance between dollar and operating statistics and to establish an interrelationship between these statistics for management purposes. The basic indicators at the Secretary of the Navy level are contained in the expenditure accounts. The performance reporting system employed in the Bureau of Supplies and Accounts provides the information needed for control through expenditure accounts.

The Bureau is continuously searching for improvements in its budget execution procedures: One of the problem areas is the necessity for predicting workload by individual field installations. Another problem

area is caused by the method of selecting quantitative units of measure in the work reporting system. One unit of work measurement is selected which is indicative of the entire work being performed in the function. Thus, the reporting system is a work indicator system rather than a system which covers all work performed. A system is needed which will provide knowledge for qualitative control as well as quantitative control. In an attempt to solve this problem area, two industrial engineering concerns have been engaged to develop engineered standards for supply functions at two supply installations. These standards, together with a method of predicting over-all workload, would provide a basis for the evolution of a qualitative control system.

CHAPTER V

SUMMARY

One of the purposes of this paper is to present the criteria of a good performance reporting system. Another purpose is to present the performance reporting system of the United States Navy. It is now necessary to compare these two purposes in order to evaluate the performance reporting system of the Navy.

A system of control cannot be effective as an aid in the management of complex affairs unless an adequate reporting system provides the information with which management makes decisions. The reporting system not only provides decision provoking information, but also points out the problem areas in which management should focus its attention. Management does not have time for the consideration of minutia. The time available to management must be spent with problems of major significance. An effective reporting system assures that only such problems reach the top level for consideration. The reporting system employed in the Department of the Navy provides decision provoking information concerning problems of major significance to top management, and also provides information needed for fine adjustments by each level of responsibility. It is a system which not only provides dynamic control information, but also information required for dynamic forecasting. The measure of efficiency in the Navy is the achievement of the mission, which is described in the plan. The plan must set up attainable targets through the use of accurate forecasting. The achievement of these

targets is the measure of efficiency. The system incorporates analysis of problem areas as they arise so that management will be able to deal with those factors which cause deviation. In addition, it provides information which is currently useful in the public relations responsibilities of all levels of Navy management.

A control system contains three elements: First, the design of the system itself to insure that the information gathered is useful and adequate; second, the setting of standards to be used for measuring performance; and third, the analysis of variation between actual performance and standard. The control process is a device to record performance, to assist in making human judgments of what should be, and to aid in comparing what should be with what is.[1] The control system utilized by the Navy is designed to insure the gathering of useful and adequate information by its reporting system. The system sets standards of performance by carefully selected planning performed jointly by the control centers and the operating levels. The system selects cost centers as control centers in order to provide adequate appropriation administration. The system utilizes the principle of exception in the analysis of variation between actual performance and planned performance. If performance varies widely from plan, investigation is undertaken; while attainment of planned performance is noted only for control purposes. The system records performance, assists management in its decisions, and aids management in comparing actual performance with planned performance.

The effectiveness of a control system is in large measure determined

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[1]E. P. Learned, D. N. Ulrich, D. R. Booz, Executive Action, (Boston, Massachusetts: Division of Research, Graduate School of Business Administration, Harvard University, 1951) p. 122.

by the extent to which it has been incorporated into the daily routine of the personnel affected by it. The performance reporting system of the Bureau of Supplies and Accounts is based on the regular work measurement reports, which cover the efforts of all operating personnel. Thus, the system contains meaning for the people who work with and under it. The performance reporting system is designed to fill the needs of all levels of management. Statistics for the system are generated at the work place, collected and reported by the local management, utilized locally for management purposes, and utilized by higher authority in every level of administration. The information is collected only once wherever possible, and that part that needs to be used at each level of management is "skimmed off" as it is needed. Every effort is made to combine needed information in one report, so that numerous reports will not be required and report preparation time will be minimum. The system incorporates unity in that the same language is spoken at the local, Bureau, and Secretarial levels. Flexibility is incorporated by selecting units of measure which are applicable to basic operating functions. The relation of reports to basic records is a feature of the system design, with control accounts being maintained at the Secretarial level and the subsidiary ledgers at the Bureau level. The control of report forms is maintained by prescribing and printing centrally the forms in which reports are made. The system is especially well designed to accomodate the periodic growth and contraction of the Navy with ease.

The system employs current control reports to spot deviations as they occur so that prompt action may be taken to correct the faults. Summary reports, incorporating both trend and analytical reports, are utilized for the regular reporting of operations. Both individual activity

and joint activity reports are utilized throughout the system. Performance reports and financial reports are made part of the same reporting system.

The system utilizes all methods of communication for all levels of management. The written report, the oral presentation, and the combination of oral and written presentations are used extensively in both briefing and regular chart room sessions. The requirement that top executives have immediately at hand certain information is met by use of a 3"x5" summary information card containing current information on each of the major programs. This enables each manager to have continuously at hand the information necessary to answer Congressional inquiries without trusting to memory for exact figures.

It is concluded, therefore, that the reporting system as established in the Department of the Navy is adequate to provide effective management control of Navy operations. The system is based primarily on quantitative information. Each level of Navy management is currently attempting to find means of incorporating qualitative information into the reporting system.

This discussion has been limited, to this point, to the reporting system employed in comptroller organizations of the Department of the Navy. The Secretary established the Office of Analysis and Review in the Executive Office of the Secretary of the Navy on 29 December 1952. This office is charged with making an adequate and thorough audit and review of requirements for materiel, facilities, and manpower, including monitoring the development of the systems and methods for computing such requirements. The office conducts an independent and objective review of Naval operating and mobilization plans, excluding the strategic and tactical concept of such plans, upon which requirements for manpower, materiel, and facilities are premised, and of the translation of such plans into specific requirements. This review is for the purpose of assuring the Secretary that there is a

proper balance and correlation among Navy programs and that statements of requirements are valid and reasonable. The office has no command or operating mission or responsibility. It is not engaged in Comptrollership functions, and does not generate information which is control in nature.

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